

LISTING OF THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF THE CLAIMS:

1-9. (Canceled)

10. (Previously Presented) An apparatus for detecting a rollover event, comprising:

- at least one first acceleration sensor in a vertical direction of a vehicle;
- at least one second acceleration sensor in at least one horizontal direction of the vehicle; and

a processor for detecting an inertial event as a function of a first signal of the at least one second acceleration sensor, and after detection of the inertial event, evaluating a second signal from the at least one first acceleration sensor for detecting the rollover event, the processor triggering a restraint device as a function of the first signal and the second signal.

11. (Previously Presented) The apparatus as recited in Claim 10, wherein:

the processor detects the inertial event one of in the form of the deployment of the restraint device in the event of one of a head-on crash and a lateral crash and as a function of an acceleration signal in one of a longitudinal direction of the vehicle and a transverse direction of the vehicle.

12. (Previously Presented) The apparatus as recited in Claim 10, wherein:

the processor performs the evaluation by examining characteristics, in that an acceleration in the vertical direction of the vehicle in the inertial event is negative and has a positive gradient.

13. (Previously Presented) The apparatus as recited in Claim 12, wherein:

the processor evaluates at least one of an acceleration in the transverse direction of the vehicle and a rotation rate about a vehicle longitudinal rate, in order to detect a lateral motion.

14. (Previously Presented) The apparatus as recited in Claims 12, wherein:
the processor evaluates a vehicle acceleration in the longitudinal direction of the vehicle.
15. (Previously Presented) The apparatus as recited in Claim 12, further comprising:
a low-pass filter for filtering an acceleration in the vertical direction of the vehicle, in order to extract a gravitational acceleration.
16. (Previously Presented) The apparatus as recited in Claim 15, wherein:
the at least one first acceleration sensor includes an offset control which is embodied as slow.
17. (Previously Presented) The apparatus as recited in Claim 10, wherein:
in an absence of a detection of the rollover event, the processor is capable, after the first inertial event, of monitoring for a new inertial event.
18. (Previously Presented) The apparatus as recited in Claim 10, further comprising:
at least one plausibility sensor.
19. (New) The apparatus as recited in Claim 10, further comprising:
a low-pass filter for filtering an acceleration in the vertical direction of the vehicle, in order to extract a gravitational acceleration;
wherein the processor performs the evaluation by examining characteristics, in that an acceleration in the vertical direction of the vehicle in the inertial event is negative and has a positive gradient,
wherein the processor detects the inertial event one of in the form of the deployment of the restraint device in the event of one of a head-on crash and a lateral crash and as a function of an acceleration signal in one of a longitudinal direction of the vehicle and a transverse direction of the vehicle.
20. (Previously Presented) The apparatus as recited in Claim 19, wherein the processor evaluates at least one of an acceleration in the transverse direction of the vehicle and a rotation rate about a vehicle longitudinal rate, in order to detect a lateral motion.

21. (Previously Presented) The apparatus as recited in Claims 19, wherein the processor evaluates a vehicle acceleration in the longitudinal direction of the vehicle, and wherein the at least one first acceleration sensor includes an offset control which is embodied as slow.

22. (Previously Presented) The apparatus as recited in Claim 19, wherein in an absence of a detection of the rollover event, the processor is capable, after the first inertial event, of monitoring for a new inertial event.

23. (Previously Presented) The apparatus as recited in Claim 19, further comprising:
at least one plausibility sensor.